

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

TAZ-246

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" (37 CFR 1.8(a))

on _____

Signature: _____

Typed or printed name: _____

Application Number

10/766,505

Filed

January 28, 2004

First Named Inventor

Jozef Brcka

Art Unit

1792

Examiner

Maureen G. Arancibia

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.

assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

attorney or agent of record. 25,686
Registration number _____

attorney or agent acting under 37 CFR 1.34.
Registration number acting under 37 CFR 1.34 _____



Joseph R. Jordan

Typed or printed name

513-241-2324

Telephone number

September 11, 2008

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*

*Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Application No. 10/766,505
Pre-Appeal Brief Request for Review dated September 11, 2008
Final Office Action mailed April 11, 2008

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 10/766,505
Filed: January 28, 2004
Applicant: Jozef Brcka
Art Unit: 1792
Examiner: Maureen Gramaglia Arancibia
Title: COMPACT, DISTRIBUTED INDUCTIVE ELEMENT FOR LARGE
SCALE INDUCTIVELY-COUPLED PLASMA SOURCES
Attorney Docket: TAZ-246

VIA ELECTRONIC FILING
Box AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant requests review of the Final Rejection dated April 11, 2008. No amendments are filed herewith. This Request is being filed concurrently with a Notice of Appeal.

REMARKS/ARGUMENTS FOR REVIEW

The Final Rejection dated April 11, 2008, rejected all pending claims, namely claims 34-47. Pending claims 34-47 are listed in an Amendment After Final filed June 13, 2008 to correct informalities, which was entered by Advisory Action dated July 3, 2008.

All claims were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,089,182 to Hama. The Examiner courteously reconsidered the rejection in response to the arguments made by Applicant in his Amendment After Final, but reaffirmed her rejection and further explained its basis in the Advisory Action, stating, in the second last paragraph thereof that "Examiner

maintains that the functional limitations in the means-plus-function language have also been fully and properly considered." In explaining her conclusion, the Examiner stated "that while not expressly taught by Hama, the inductor of Hama would be structurally capable of performing the specified function ...".

The Examiner has the burden of producing evidence that Applicant's claims are anticipated. Lacking evidence of an express teaching, she asserts that function claimed by Applicant is essentially inherent, but she makes that assertion without evidence or scientific proof. That alone renders the rejection under 35 U.S.C. §102(b) defective.

Bare assertions by the Examiner, unsupported by evidence, risks basing rejections on erroneous assumptions. That is the case here. The Examiner's statement that the inductor of Hama is "capable of performing the specified function" is scientifically incorrect. (See Declaration of Jozef Brcka, PhD, filed Sept. 11, 2008.)

Applicant's claimed function is neither taught by Hama nor is it inherent in the Hama inductor. Accordingly, the art relied upon by the Examiner in making the final rejection omits an essential element required for a rejection under 35 U.S.C. §102(b).

The Invention

The application discloses an antenna of an original design that will produce what Applicant calls a segmented plasma useful in vacuum processing systems for processing semiconductor wafers. The embodiments disclosed include antennas formed of sheet material with cut-outs that impose a serpentine current flow path that concentrates inductively coupled energy in such a way as to produce a ring-shaped plasma of alternating high and low power density around and spaced from the center of a processing chamber. The application claims an antenna that performs a specified function, as characterized by the Examiner, as: "performing the specified function of coupling RF energy from the RF alternating high and low plasma density distribution, wherein small cross-section segments of the loop couple energy into the high power density segments of the plasma and the large cross-section segments of the loop couple energy into the low power density segments of the plasma, ... [where]

segments of alternating higher and lower cross-sections and widths in the inductor ... create alternating localized areas of lower power density or higher power density due to the relative concentration of the applied RF power by the [small cross-section] conductive segments." For purpose of argument, this characterization may be used to simplify issues for this Pre-Appeal Brief Request for Review.

The Rejection

Claims 34-47 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,089,182 to Hama ("Hama").

The Issue

Whether the Examiner has properly rejected claims that are not expressly taught by *Hama* by merely asserting, without supporting evidence, that the inductor of *Hama* is "structurally capable of performing the specified function."

Argument

To reject claims under 35 U.S.C. §102(b), an Examiner must find the combination of each and every element of a claim in the prior art. Where, as here, an element is not expressly taught by a reference, a claim may be rejected if that element is shown to be inherent in the reference. Assuming, for the purpose of argument, that a claimed function that is not expressly taught is inherent if the reference is "structurally capable of performing" a claimed function, it is essential that the Examiner either cite evidence to establish this inherent capability or must show that the so-called capability is a matter of common knowledge among those skilled in the art.

Here, there is no such evidence or showing. The Examiner tenders instead her own technical opinion in the form of "cogent technical reasoning" based on no more than elementary rules of thumb such as the "right-hand rule". Such a basis for a rejection must be rejected as a matter of law. To allow bare assertions of unsupported fact by an Examiner to replace a requirement for evidence runs

Application No. 10/766,505
Pre-Appeal Brief Request for Review dated September 11, 2008
Final Office Action mailed April 11, 2008

the risk of determining the rights of applicants based on assumptions of fact that are erroneous or principles that are contrary to science.

In the present case, that risk is realized as a result of the Examiner's substitution of her own technical reasoning for substantive evidence. One skilled in the art might question whether the small notches of the *Hama* inductor, added to the conductor to accommodate thermal expansion and being far removed from the plasma on the opposite side of the showerhead, would have the capacity of performing the specified function of creating a alternating high and low power density distribution in the plasma. This question is answered by the simulation of the *Hama* inductor performed by Jozef Brcka, PhD, as set forth in his Declaration filed September 11, 2008. In the Declaration, Dr. Brcka concludes that the Examiner's assertions are wrong. The *Hama* inductor does not have structure rendering it capable of performing the function specified in the claims.

Conclusion

It is submitted that the Examiner has failed to make a proper rejection under 35 U.S.C. §102(b). Accordingly, it is respectfully requested that either the Final Rejection be reversed or the application be remanded to the Examiner for further proceedings.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

BY /Joseph R. Jordan/
Joseph R. Jordan, Reg. No. 25,686

2700 Carew Tower
Cincinnati, OH 45202
(513) 241-2324
(513) 241-6234 (Facsimile)